

Dear FCC,

ABSTRACT: If it looks like a public utility and acts like a public utility then treat it as a public utility.

I am a software engineer specializing on Environmental Data Management systems used by EPA and major Environmental Consulting Agencies. I work exclusively from a home office as a telecommuter. To perform my job I require broadband access to the Internet using a wide variety of internet protocols (not typically used by consumers) and consuming significant bandwidth. I do NOT host a server from this office, that's what co-location firms are for. I do frequently transfer large data files both up stream and down stream and frequently use encryption and Virtual Private Networks in my work.

Like many consumers, I do not have a choice in broadband carriers. The only provider is Time Warner Cable of Maine. This is a function of Cable Licensing regulations. Because of the nature of my work and its demands on bandwidth, dial-up and satellite are not a reasonable option. Because of my location, Digital Subscriber Line (DSL) service is not available.

It is reported that Time Warner has begun using packet shaping technology. I believe this is an effort to maximize their profits rather than their quality of service.

[http://digg.com/tech\\_news/Time\\_Warner\\_TW\\_Officially\\_Announces\\_Packet\\_Shaping\\_for\\_All\\_RR\\_Users](http://digg.com/tech_news/Time_Warner_TW_Officially_Announces_Packet_Shaping_for_All_RR_Users)

<http://www.google.com/search?hl=en&q=%22Time+Warner%22+%22Packet+Shaping%22>

According to Time Warner terms of use [[http://help.rr.com/HMSFaqs/e\\_network\\_perf.aspx](http://help.rr.com/HMSFaqs/e_network_perf.aspx)], the use of Virtual Private Networks and Secure Socket transmissions will now be considered a violation of their TOS policy subject to termination or lowered QoS. My only other option is a fractional T1 service that would increase my broadband costs by 1,000% if it's even available for this location.

#### DIRECT OBSERVATIONS:

I use Vonage VoIP service for my business. I have noticed a marked reduction in quality of service and increased frequency in call termination between 3 and 6pm. Given that this is a Peak period I conclude that Vonage

traffic is subject to reduced QoS or other Packet Shaping techniques. In speaking with neighbors who use the Time Warner VoIP service I find that none report similar disruption. My conclusion is that Time Warner is using their network infrastructure to degrade the quality of a competing service.

As part of my duties I frequently download multi-gigabyte data sets for use in Development or Troubleshooting. Recently I've noticed that these transactions are being "throttled". Transmission begins at ~760 KBps but is reduced to < 42 KBps after about 1 Megabyte is transferred. This 20-fold increase in the time it takes to download the data set results in significant impact to our clients. I don't like telling the Environmental Protection Agency representatives that I can't respond to their Level 3 support request to EarthSoft because Time Warner is blocking transmission of their data.

## CONCLUSIONS:

In a pure market driven model, broadband communication is a commodity. We see evidence of this in the form of QoS manipulation by the carriers with deference paid to content providers who sign agreements with the carriers or with deference to the carrier's own content. In radio broadcast, this is called pay for play, it is illegal. This market driven model is at odds with the implementation of broadband providers like Time Warner who are licensed groups of consumers in a model that most closely resembles a Public Utility.

## RECOMMENDATIONS:

Broadband providers should be subject to the Public Utility Commission when their implementation model resembles a public utility. That the media is un-shielded twisted pair copper [telephone], coaxial wire [cable], fiber-optic [FTOS] or wireless broadcast [WiFi, Cellular, ...] should make no difference. Each are granted license to provide a service over limited public resource to a specific geographic area(s). If they wish to increase profits then they should increase capacity.

Broadband providers should NOT be in the business of providing content. This creates a clear conflict of interest. Separating these business units ensures that content providers compete on a "level playing field" (see

direct observations regarding VoIP). Given the current legal environment it seems unreasonable to allow one agent to control both content and distribution through a limited public resource.

<http://mashable.com/2006/10/13/time-warner-to-sue-youtube/>

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